

$$6.) \quad 6ba - 4ba$$

$$= (6-4)ab$$

$$= 2ab$$

$$ii) \quad 6 \cdot 8b - 4 \cdot 8b$$

$$= 6 \cdot 8b - 4 \cdot 8b$$

$$= (6 \cdot 8 - 4 \cdot 8)b$$

$$= 2b$$

$$iii) \quad 3 \cdot 5abc - 10 \cdot 5abc$$

$$= 10 \cdot 5abc - 3 \cdot 5abc$$

$$= (10 \cdot 5 - 3 \cdot 5)abc$$

$$= 7abc$$

$$iv) \quad 3 \frac{1}{2}, 8 \frac{1}{2} \text{ mn}$$

$$= 8 \frac{1}{2} \text{ mn} - 3 \frac{1}{2} \text{ mn}$$

$$= \left(8 \frac{1}{2} - 3 \frac{1}{2} \right) \text{ mn}$$

$$= \frac{17}{2} - \frac{7}{2} \text{ mn}$$

$$= \frac{17-7}{2} \text{ mn}$$

$$= \frac{10}{2}$$

$$= 5$$

$$7-i) 2a^2b^2 + 5ab^2 + 8a^2b^2 - 3ab^2$$

$$= 2a^2b^2 + 8a^2b^2 + 5ab^2 - 3a^2$$

$$= 10a^2b^2 + 2ab^2$$

$$ii) 4a + 3b - 2a - b$$

$$= 4a - 2a + 3b - b$$

$$= 2a + 2b$$

$$iii) 2xy + 4yz + 5xy + 3yz - 6xy$$

$$= 2xy + 5xy - 6xy + 4yz + 3yz$$

$$= (2+5-6)xy + (4+3)yz$$

$$= (7-6)xy + 7yz$$

$$= xy + 7yz$$

$$iv) ab + 15ab - 11ab - 2ab$$

$$= (1+15-11-2)ab$$

$$= (16-13)ab$$

$$= 3ab$$

$$v) 6a^2 - 3b^2 + 2a^2 + 5b^2 - 4a^2$$

$$= 6a^2 + 2a^2 - 4a^2 + 5b^2 - 3b^2$$

$$= (6+2-4)a^2 + (5-3)b^2$$

$$= 4a^2 + 2b^2$$

$$vi) 8abc + 2ab - 4abc + ab$$

$$= 8abc - 4abc + 2ab + ab$$

$$= (8-4)abc + (2+1)ab$$

$$= 4abc + 3ab$$

$$vii) 9xyz + 15yxz - 10zyx - 2zxy$$

$$= 9xyz - 2zxy + 15yxz - 10zyx$$

$$= (9+15-10-2)xyz$$

$$= (24-10-2)xyz$$

$$= 12xyz$$

$$viii) 13pqr + 2p + 4q - 6pqr + 5pqr$$

$$= 13pqr - 6pqr + 5pqr + 2p + 4q$$

$$= (13-6+5)pqr + 2p + 4q$$

$$= 12pqr + 2p + 4q$$

$$ix) 4ab + 0 - 2ba$$

$$= 4ab - 2ba + 0$$

$$= (4-2)ab$$

$$= 2ab$$

$$x) 6x^2y - 2xy^2 + 5x^2y - xy^2$$

$$= 6x^2y + 5x^2y - 2xy^2 - xy^2$$

$$= (6+5)x^2y - (2+1)xy^2$$

$$= 11x^2y - 3xy^2$$